ART. XX.—Report of the Cremation Committee of the Royal Society of Victoria, appointed to enquire into and report upon "Cremation" and other methods of disposing of the dead, with particular regard to hugiene and economy.

To the President and Members of the Royal Society of Victoria.

Your Committee has the honour to report that it has held two preliminary and three general meetings, and has considered the various methods proposed for the sanitary and economic disposal of the dead. ^{*} Your Committee finds from the evidence collected, that burial now entirely fails to satisfy the demands of hygiene. There are the strongest reasons for concluding that gravevards have been in the past, and are now, prolific sources of deadly disease, not only by reason of mephitic vapours arising thence into the atmosphere, but also by percolation of putrid liquid matter in water drainage to considerable distances. Many cases have notoriously occurred, in which wells have been demonstrably poisoned in this manner at long distances from the source of infection. The risk of this is immensely aggravated as population increases. In America, Europe, and Victoria itself, the towns grow and surround the cemeteries, which soon become full. New ones are formed further away, and the land, being imperatively required by the living, the bodies are unceremoniously removed from the old graveyards, which are generally used for building blocks, public gardens, and other purposes. The removal is a dangerous process, the disturbance of the putrid, poisonous remains having been almost certainly the cause of outbreaks of malignant disease epidemics. It is practically impossible to find a site for a cemetery anywhere in the vicinity of towns, such that there would be no danger to health to the living, in which the air, the water, and the earth of the neighbourhood would be secure from the deadly contamination.

Report of the Cremation Committee.

As regards Economy.—The disposal of the dead by burial is already an oppressive charge to the large majority of the population wherever it is numerous. Cemeteries are made further and further away, and the longer conveyance materially enhances the expense, and must continue to do so more and more. The unavoidable crowding of cemeteries has also had the effect of destroying, or outraging, the reverential sentiment which fondly regarded burial as finally providing for the permanent and undisturbed repose of the departed.

After being first filled with corpses to the extent of from twelve to twenty-two (seventy according to the Duke of Westminster-Times, December 9, 1889) in each grave, in nearly all old cemeteries, the ground is similarly used over and over again at intervals of a very few years; and the purchase of space for a grave or vault, supposed at the time to secure ownership in perpetuity, is a delusion and a snare; as a matter of fact, headstones are broken up for road metal &c.: the coffins are burned, and the bones used for manure or shot down as rubbish. No respect is shown for the remains of the dead, or for the feelings of their living representatives. All ideas of sanctity and reverence are violated. The use of vaults scarcely delays the process. Persons who have wealth and influence may, if watchful, be able to delay the sacrilege during their lives, but the next generation loses both inclination to resist, and power to postpone it.

The method pursued by the Parsees is much less objectionable hygienically considered. It consists in simple exposure on the top of a tower for vultures to dismember and devour the corpse. This does not engross an increasing quantity of land, or involve the descenation of being dug up again in a few years to make room for some one else, and perhaps of being shot as rubbish. Still less does it, like burial, poison the earth, air, and water, to the destruction of the living; but it is practised by but a small section of the population of India, outside of which it has no advocates, and is not likely to extend.

Desiccation has been recommended, and may be adapted to a very dry climate, but apparently not to others. In the Catacombs at Malta, Palermo, and some other places it has been used; but the results are such as to disgust strangers, and present such features of irreverence and desceration, as to preclude its wider adoption. It may be possible to secure hygienic results by it, but there seems to be much more risk

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of the contrary. A movement in favour of desiccation has occurred in America, but your Committee has no reason or wish to think that it has any chance of success.

The use of quicklime has been successfully tried in several instances, where large numbers killed in lattle had to be rapidly disposed of, and in some other cases. It does not, however, appear to be adapted for general use, particularly where lime is not readily and cheaply procurable.

Another method has been suggested of disposing of the dead, by simply immersing them in a bath or tank of fused alkali, in which they entirely disappear without leaving any discoverable residue. The cost and feasibility of this method would depend upon the abundance and accessibility of the material, but it seems questionable whether it would ever commend itself to public sentiment. There appears, however, to be no hygienic objection to it.

The expedient, which seems to be in a fair way to supersede burial, is Cremation-an old one revived, and practised widely to-day. Cremation is general in Japan, and in India, where the Government has successfully introduced improved incinerators to expedite and perfect the primitive process in use by the Hindoos. Cremation is the simplest, cheapest, and most hygienic of all; it can be easily effected wherever there are combustibles, and it appears particularly adapted for use in cities, being rapid, economical, final and complete. The residue is small, innocuous, and easily preserved in urns, the cost of which is triffing. Cremation is becoming popular in Italy, where it is rapidly extending. Large numbers are now cremated in Paris, and at Gotha. In England, its progress has been even more rapid than anywhere else, except Rome. At Milan, 679 cremations have been effected in 14 years, but only 227 in the first 7 years. At Lodi, 38 in 13 years. At Rome, where the practice has grown more rapidly than at any other place in Italy, there have been 297 cremations in 7 years. At 21 towns in Italy there were in all 1463 cremations in the 14 years ending with 1890. At Woking, in Surrey, the first cremation took place in 1885, and the numbers since cremated there yearly, are, 3, 10, 13, 28, 46, 54, and 99 in 1891-253 in all; the increase being more uniformly progressive than even at Rome, which began with 15, and ended with 90 in 7 years, and had fewer in 1886 and 1887 than in 1885. The Duke of Bedford, Lord Bramwell, and Mr. Wm. Eassie, were all

cremated during the current year, and Crematories are being established at Manchester, Liverpool, Ilford, Darlington, and elsewhere.

The great advantages of Cremation appear to be-Firstly. the perfect extinction, with the corpse, of the possibility of communication by it of any disease to the living. Secondly, its economy. The cost at Paris is only two francs, and it is less in Japan and India. There is every reason to believe that it could be done in Melbourne for a guinea each at most, including examinations, memorial urn, &c. Carriage must sometimes form a comparatively important item in the cost. It can, however, be much reduced, as portable iron crematories have been successfully constructed for military purposes, and will no doubt come into general use. Thirdly, its finality. Cremation will abolish at once all the shocking desecration which is now inseparable from the burial system. Fourthly, the innocuous residual ashes, less than a quart in quantity, can be preserved in an urn of æsthetic material and device, and deposited either in a public institution (or Columbarium), or confided to the care of the family ; with Fifthly, the satisfactory certainty to all concerned, that the body itself can never afterwards be subjected to disturbance, insult, or desecration, or cause incalculable harm to others.

The only apparently plausible objection that has ever been urged against Cremation is, that the body can never afterwards be available as evidence in cases of murder, particuarly by poison. A case, however, occurred at Milan, which goes far to prove that the risk is actually greater in case of burial (see Robinson, "Cremation and Urn Burial," pp. 177-8). The parents of a deceased child obtained all the certificates necessary for its burial, before resolving to have it cremated. The additional certificates however, which were required at the Crematorium, elicited the fact that the child had been poisoned accidentally by eating sweetmeats containing copper. Your Committee would strongly recommend that no system whatever be tolerated which does not provide amply strict examinations to obviate the possibility of such facts passing undetected.

An Act, legalising Cremation under conditions, has lately been passed by the South Australian Legislature at Adelaide.

Lastly, the legal aspect of the question remains to be considered.

Sir Jas. F. Stephen's judgment in the case of Dr. Price, in 1874, set at rest the question of the legality of Cremation in England, and decided that there was then no law against it there, so long as no nuisance was caused. Of course no system of disposing of the dead should be tolerated, unless all that can be called a nuisance is absolutely prevented. The objection to burial is that it produces evils far worse than nuisances. Since the judgment in question, the Cremation Society of England, though previously deterred by the discountenance of the Home Secretary, proceeded at once to cremate, and has continued to do so since. The same view appears to have been officially taken here, in the Metropolitan General Cemetery Bill, which was introduced by the Government in the Legislative Assembly in 1891, but made no further progress. The existence of this Bill implies that no legal objection to Cremation could be discovered. It provides "for the establishment and management of a Metropolitan General Cemetery" at Frankston, with nine managers; two to be appointed by the Government, and seven to be elected by the Councils of eighteen city and surburban corporations. £20,000 was to be granted from the consolidated revenue to start with, and the corporations were to contribute £2500 a year, until the fees to be charged should amount to a sufficient sum to defray expenses. The cemetery consists of 3008 acres, worth £15,000; distance from Melbourne 26 miles. It is 111 miles round, and the cost of fencing it has been estimated at £24,000. More thousands are required for a short branch The Bill provides that the managers may make railway. regulations, to be approved by the Governor in Council, prescribing fees for burials, &c., and also for cremations. Section 71 provides that any one may direct by Will or otherwise, that his body shall be cremated, and that his executors or others may earry his direction into effect, in the cemetery, under-regulations to be made under Section 77. The admission that Cremation is not illegal is something, and the attempt to legalise it is more. But cremation at a distance of 26 miles is useless. There is ample proof that its proper performance within a city admits of no reasonable objection. Persons living next door would not even know that it was in progress, and in itself it is essentially purifying as well as innocuous.

Hygiene demands the reduction to a minimum of the time and distance between the death of the body and its

final disposal. One weighty objection to burial is, that it must be as far from the city as convenient, notwithstanding the cruel inconvenience and expense to the mourning relatives in the performance of their sacred duties. Their strong claims to sympathy and consideration appear to have been wholly ignored in the Frankston scheme. But in Melbourne now, hundreds of pious mourners visit the graves of their departed relatives weekly, and even more frequently, to plant and carefully tend flowers around them. They would be cruelly debarred from performing this pious duty by the extra cost and time involved in frequent journeys, even by railway, of 52 miles. Cremation would abolish this difficulty entirely. Instead of having to neglect these duties altogether, or to travel, say weekly or daily to Frankston to fulfil them, they would have the actual pure ashes themselves, in an elegant urn or other receptacle, in either the mortuary chapel, or family household, where they could fulfil their cares and soothe their feelings by daily viewing them, and decking them with fresh flowers.

As regards economy, compare a central City Crematory and Mortuary Chapel, costing perhaps £2000 or £3000, and 2s. 6d. or 3s. worth of fuel, and a fee of a guinea, with a Cemetery 26 miles off, costing for land £15,000, fencing £24,000, and several thousands more for a branch railway to it. But these are of minor importance concerning the state contribution only. The salient point is, what will be the charges for each funeral to bereaved mourners-the people ? The deaths in Melbourne may now be taken at 10,000 yearly (10,412 in 1889, and 9,297 in 1890, Hayter), i.e., 25 to 28 daily. £10 is surely a low average for ordinary funerals now, and transport is always and necessarily, a formidable extra; and however performed, the 26 miles cannot but add largely to the expense, falling upon the unfortunate mourners in the shape of undertakers' bills, thus augmented by at least 25 or 30 per cent.

The fees, also, of unknown amount, would also fall upon them, and to provide the projected embellishments upon the scale hinted at, the fees must be anything but light. Even supposing that the increase altogether might not exceed 50 per cent., £15 for each funeral, multiplied by 10,000, would be at least £150,000 to be paid yearly by the people, beside the contribution of the state. Cremation would perform the whole service for probably £1 Is. each, or £11,000 a year, in a few crematories costing perhaps £2000 each.

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Your Committee for all these reasons confidently recommends Cremation as incomparably the best solution of every difficulty, particularly on hygienic, sentimental, and economical grounds.

Your Committee, however, also feels called upon to remark here that not only in the Bill in question, but also in the Cemeteries Act of 1890 (No. 1072, now in force), some of the most important facts which should be kept in view in disposing of the dead seem to have been entirely ignored. Its framers appear to rely, with most mistaken confidence, upon hermetically closed coffins and cemented vaults to prevent the escape of the poisonous gases generated in decomposition. This is a fallacy. Such escape cannot be prevented. Your Committee cannot do better than repeat the decisive testimony of Sir John Simon, the eminent Sanitarian (quoted in the Duke of Westminster's letter to the "Times," dated December 9, 1889) :---

"The leaden cofin sooner or later yields, and gives vent to its fatal contents. The most successful attempt at hermetical enclosure does not reach beyond postponement of the effusion through the atmosphere of the products of decomposition. Overcrowding the dead causes the soil to be saturated and supersaturated with decomposing animal matter, polluting the water-springs and vitiating the air; and it is by the air, vitiated by organic matter undergoing decomposition, that epidemics and infectious diseases most readily diffuse their poison and multiply their victims."

Your Committee has made its deliberate recommendation upon the evidence before it. It is perhaps scarcely necessary to say that that recommendation does not include that those who prefer burial should not be as free as the advocates of cremation to do what *they* prefer. At the same time, it seems clear that both the *public* advautages of cremation, and the *public* dangers of burial, are infinitely more important and practical than any *private* predilections either way.

(Signed)

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